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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/302,375	04/30/1999	ALAN STANLEY JOHN CHAPMAN	13118	6808

293 7590 03/10/2005

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EXAMINER	
NGUYEN, STEVEN H D	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/302,375	CHAPMAN ET AL.
	Examiner	Art Unit
	Steven HD Nguyen	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,36 and 39-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,36 and 39-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Election/Restrictions

1. This application contains claims 15-35 and 37-38 drawn to an invention nonelected without traverse in the reply filed on 2/14/03. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-14, 36 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (USP 6483805) in view of Bellaton (USP 6473425).

Regarding claims 1-14, 36 and 39-43, Davies discloses (Figs 1-6 and col. 1, lines 14 to col. 12, lines 40) a transmission device (Fig 1, Ref 10) for forwarding aggregate traffic streams towards a destination point (Fig 1, Ref 10), an aggregate traffic stream being comprised of a plurality of packets said transmission device comprising an input for receiving the aggregate

traffic streams (Fig 1, Ref 10 includes an input for receiving the packet streams); an output for forwarding the aggregate traffic streams to the destination point without adding any data elements to the packets of the aggregate traffic streams (Fig 1, Ref 10 has an output for transmitting the packet streams); control unit has an input for receiving acknowledgement messages issued from the destination point to notify said transmission device that a certain packet released from said output has been received at the destination point, each acknowledgement message conveying information relative to a particular one of said packet identifiers, said control unit being further operative to process successive acknowledgement messages received from the destination point in conjunction with said record of packet identifiers for regulating a rate at which packets are released from said output; process said data structure in conjunction with successive acknowledgement messages received from the destination point to regulate the rate at which packets are released from said output in order to determine whether packets forwarded to the destination point have not been received at the destination point; if at least one packet has not been received at the destination point, said control unit is operative to reduce a rate of release of the packets from said output; progressively increase a rate of release of the packets from said output until a packet is not received at the destination point (Col 8, lines 25 to col. 9, lines 44). However, Davies fails to disclose a control unit operative to generate for each packet of each aggregate traffic stream passing from said input to said output a unique packet identifier for distinguishing the respective packet from all of the other packets by extracting at least a portion of the contents of the respective packet to serve as said packet identifier, wherein said at least a portion of the contents of the respective packet is not specifically designated for packet identification purposes within the respective packet; maintain a

record of the generated packet identifiers. In the same field of endeavor, Bellaton discloses (Fig 1-11 and col. 1, lines 5 to col. 11, lines 3) a router (Fig 9) which includes a controller (Fig 9, Ref 112) for generate for each packet of each aggregate traffic stream passing from said input to said output a unique packet identifier for distinguishing the respective packet from all of the other packets by extracting at least a portion of the contents of the respective packet to serve as said packet identifier, wherein said at least a portion of the contents of the respective packet is not specifically designated for packet identification purposes within the respective packet; maintain a record of the generated packet identifiers (Fig 9, Ref 114 and See Fig 10 and col. 8, lines 53 to col. 9, lines 20, wherein the portion of the packet is extracted from the packet such as IP addresses and packet sequence number) in a data structure before forwarding the packets to the destination node, said control unit being operative to record said-generated packet identifiers in said data structure; at least a portion of the contents of the respective packet is a bit sequence and calculating a corresponding sequence number for each generated packet identifier, said method further comprises mapping each sequence number to the respective packet identifier in said data structure (Fig 10 is a data structure for storing the packet identifier which is extracted from the packet header; See Fig 9, Ref 112 for extracting the source, destination ID and packet sequence number for generating packet identifier and storing in the queue control record 114; See Fig 10 and col. 8, lines 53 to col. 9, lines 20, before forwarding the packet to its destination node).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for generating a packet identifier based on the extracted information from the packet header for storing in the data structure be fore forwarding

the packets as disclosed by Bellaton into Davies's system and method. The motivation would have been to improve a throughput of the system.

Response to Arguments

5. Applicant's arguments filed 12/15/04 have been fully considered but they are not persuasive.

In response to pages 8-13, the applicant states that the prior arts do not disclose a method and system for extracting a portion of the contents of the respective packet to serve as the packet identifier, wherein the portion of the contents of the respective packet is not specifically designates for packet identification purposes within the respective packet and without adding any data elements to the packets of the aggregate traffic streams. Davies discloses a method and system for transmitting data packet without adding any information to data packet as set forth in the office action section 4. Bellaton discloses a method and system for receving the data packets and extracting a portion of the packet such as IP addresses and sequence number of the packet for using to generate a packet identifier which is stored in the buffer before forwarding the data packets onto output link to the destination point; See col. 8, lines 54 to col. 9, lines 20, an entry of a record for identifying a packet includes IP addresses and TCP sequence number "read on generated packet identifier which is not specifically designated for packet identification purposes within the respective packet as stated with the agurement of the applicant". The node uses these stored identifier packet for controlling the retransmitting data packet between the source and destination. So, the teaching of Davies and Belatton perform the claims as stated in the specification of pages 8-10 which discloses the packet identifier is based on IP addresses and

sequence number of the packet in order to identify a packet of a packet stream from a plurality of packets streams between the sender and receiver.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Muller (USP 6650640) discloses a method and system for parsing the packet header for extracting a portion of the header for using to generate a flow key which includes IP addresses. This portion is stored in a record.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
3/5/05